Nevada Site Specific Advisory Board (NSSAB)

Full Board Virtual Meeting

4:00 p.m. – May 19, 2021

Members Present:	Gail Alexander, Frank Bonesteel (Chair), William DeWitt, Karen Eastman, Gary Elgort, Charles Fullen, Anthony Graham (Vice-Chair), Mark Hilton, Bruce Jabbour, Ronald Korner, James Moldenhauer, Dan Peterson, Richard Stephans, Dina Williamson-Erdag
Members Absent:	William Dolan, Janice Six, Favil West
Liaisons Present:	Richard Arnold (Consolidated Group of Tribes and Organizations [CGTO]), Justin Costa Rica (State of Nevada Division of Environmental Protection [NDEP], Richard Friese, (U.S. National Park Service [NPS]), Phil Klevorick (Clark County)
Liaisons Absent:	Jared Brackenbury (Lincoln County Commission), Leo Blundo (Nye County Commission), John Klenke (Nye County Natural Resources and Federal Facilities Office [NRFFO]), Patrick Lazenby (Nye County Emergency Management [NCEM]), Delon Winsor (Esmeralda County Commission)
Department of Energy (DOE):	**Environmental Management (EM) Nevada Program**: Robert Boehlecke (Deputy Designated Federal Officer [DDFO]), Tiffany Gamero, John Myers, Bill Wilborn **National Nuclear Security Administration/Nevada Field Office (NNSA/NFO)**: Dr. David Bowman, John Daniels, Scott Wade
Government Contractors:	**Navarro**: Michelle French, Brian Haight, Kevin Knapp, Dona Merritt, Patty Neese, Ken Rehfeldt, Ari Rosenberg, Jesse Sleezer, Barbara Ulmer **Desert Research Institute (DRI)**: Brittany Kruger, Julie Miller, Chuck Russell **Mission Support and Test Services (MSTS)**: Reed Poderis, Alissa Silvas
Public:	Wayne Barber (Exchange Monitor), Kelsey Shank (theEdge, LLC)

Open Meeting/Chair's Opening Remarks

Chair Frank Bonesteel thanked everyone for attending the meeting. Member Dan Peterson moved to approve the draft agenda as presented. The motion was seconded and passed unanimously. Chair Bonesteel informed the NSSAB that Vice-Chair Anthony Graham would be conducting the Board business for the rest of the meeting's agenda.

Written Public Comment Read into Record

There was no written public comment.

Liaison Updates

Clark County (*Phil Klevorick*)
Liaison Phil Klevorick updated the Board on a project to develop a series of virtual field trips for students in Science, Technology, Engineering, and Math (STEM)-focused programs. For the past several months, he has worked with the EM Nevada Program, NNSA/NFO, the National Atomic Testing Museum (NATM), and Navarro to plan the concept, with the first virtual field trip launched yesterday. He publicly thanked all involved for the support of this project.

CGTO (*Richard Arnold*)
Liaison Richard Arnold noted that he has been participating in planning meetings for the National Transportation Stakeholders Forum that will be held virtually in June 2021. The Tribal Radioactive Materials Transportation Committee has been meeting regularly to provide updates and draft language to build capacity for the tribes' participation in EM activities. The Tribal Planning Committee (TPC) has been holding quarterly meetings with DOE to provide and receive updates. Liaison Arnold noted that the TPC will be participating in a field visit at the NNSS in May 2021. The State and Tribal Governments Working Group will be hosting long-term stewardship sessions regarding EM remediation activities on the Tonopah Test Range. Liaison Arnold concluded that the CGTO is hosting its annual meeting in August 2021 that will include participation from NNSA/NFO and the EM Nevada Program.

NDEP (*Justin Costa Rica)*
Liaison Justin Costa Rica noted that he is filling in for Christine Andres while she is on vacation. NDEP will be backfilling his position this summer to assist with the case load. Liaison Costa Rica concluded that the NDEP office is beginning to relax some of the mask mandates and plans to have all employees back in-person by the end of June 2021.

NNSA/NFO Update (*John Daniels, NNSA/NFO)*

Mr. John Daniels reported that there is a wildfire located in a remote area of the northwestern corner of the NNSS. The NNSS Fire and Rescue and Bureau of Land Management fire crews are working diligently to keep the wildfire under control. The fire is not known to be in any areas of contamination or unexploded ordnance at this time. There have been no personnel injuries, and the fire is not currently endangering any infrastructure. The NNSA/NFO has also relaxed mask mandates for fully vaccinated employees, although still practicing social distancing and other Centers for Disease Control and Prevention (CDC) guidance, which has affected the resumption of in-person meetings and public tours of the NNSS.

Mr. Daniels continued that the new Secretary of Energy Jennifer Granholm, nominated by the President and confirmed by the Senate, was sworn into office in February 2021. The President has nominated Jill Hruby for NNSA Administrator, pending Senate confirmation. Mr. Daniels concluded that Laura Tomlinson has been selected as the permanent NNSA/NFO Deputy Manager.

U.S. DOE Update (*Robert Boehlecke, DOE*)

DDFO Robert Boehlecke opened with an item that Liaison Klevorick touched on during his liaison update. The EM Nevada Program collaborated with the Clark County School District (CCSD) to host a virtual field trip for students at Lied STEM Academy (LSA), a Vegas-based, state-certified magnet school for grades six – eight with a focus on project and inquiry-based learning. The virtual field trip was hosted yesterday with over 200 students and staff in attendance. The hour-long presentation was conducted by Tiffany Gamero, an environmental scientist with the Program. EM Nevada's event was part of a larger effort to bring the NNSS to students at LSA through virtual field trips on several topics. NNSA/NFO, MSTS, and the NATM are also participating in this effort. LSA and CCSD curriculum coordinators selected the EM Nevada groundwater mission as the first topic to be developed into a virtual field trip. The presentation included information on NNSS history, the Program's groundwater characterization mission, a day in the life of a groundwater worker, and answering student questions. It is anticipated that this collaboration will be a pilot program with the potential to scale-up for use at other schools. The recording of the virtual field trip is accessible at https://youtu.be/zmHuBmVjZRg.

DDFO Boehlecke reported that Navarro field crews are preparing this week for the upcoming sampling of groundwater monitoring well ER-EC-11. Well ER-EC-11 is located off the northwestern border of the NNSS on the Nevada Test and Training Range (NTTR), which is controlled by the U.S. Air Force. This well is located north of the wildfire. In October 2009, validated laboratory results identified the presence of tritium at 10,600 picocuries per liter (pCi/L) in a groundwater sample. These results were consistent with computer model forecasts that anticipated tritium would be detected beyond the northwestern NNSS boundary in the Pahute Mesa area. Scientists are confident there remains no risk to public drinking water sources beyond the NNSS and NTTR, due to the immobility of some contaminants, the extremely slow movement of others, and the natural process of radioactive decay. Based on conservative, scientific calculations and sampling results, it will take at least 100 years for tritium to reach the closest public land boundary, and at that time, the concentration of tritium is estimated to be under SDWA standards.

DDFO Boehlecke continued that analysis of the latest samples from well ER-EC-11 are anticipated to be returned from the laboratory in the July 2021 timeframe. In March 2021, the NSSAB provided recommendations on the Communications Plan for Offsite Groundwater Contamination as part of the Board's work plan for FY 2021. If the results from ER-EC-11 exceed the thresholds established under the updated Communications Plan, the EM Nevada Program will execute notifications as planned, including the NSSAB and intergovernmental liaisons.

DDFO Boehlecke updated that preparations continue for the transport of the Nevada Spheres to Idaho for processing and repackaging prior to final disposal at the Waste Isolation Pilot Plant in New Mexico. The spheres have undergone real-time radiography, tomography, and gamma camera inspections at the NNSS to validate historic knowledge and verify safety for transportation.

Due to ongoing activities at the Idaho site, it is now anticipated that the shipments will occur in January 2022.

On April 26, 2021, DDFO Boehlecke stated that a generator from Oak Ridge, Tennessee reported that a truck transporting waste to the NNSS experienced a load shift resulting from a hard braking event of two metal waste boxes on the flatbed trailer. The truck came to a stop on the I-15 on ramp from Nipton Road in California, where the event occurred. The shipper worked with the appropriate response services to reposition and resecure the load with a crane. The load was delivered as scheduled the next business day. Upon receipt at the NNSS, the packages were surveyed and closely inspected with no damage or contamination found, and all boxes were disposed.

DDFO Boehlecke reiterated that the EM Nevada Program had previously opted to extend the transition of all Program-hosted public events to a virtual format through May 31, 2021. This approach will be reevaluated in the next couple of weeks to determine the format for upcoming public meetings.

Other NSSAB Business (*Anthony Graham, NSSAB Vice-Chair*)

Chair Bonesteel reported that he and Vice-Chair Graham had the privilege to attend the spring EM Site-Specific Advisory Board (EM SSAB) National Chairs meeting virtually last month. He presented Board concerns during the Round Robin and provided NSSAB input for Charge 1 – improvements for public outreach and for Charge #2 – improvements for the EM Strategic Vision. Chair Bonesteel noted that he will be working with a committee on Charge #1 in the upcoming months, and he encouraged an NSSAB member to volunteer to join the committee for Charge #2. Interested members are asked to contact the NSSAB Office. EM SSAB meeting materials are accessible at https://www.energy.gov/em/articles/chairs-meeting-april-2021 and recordings can be viewed for Day 1 https://youtu.be/TBqHjNw7DPs and Day 2 https://youtu.be/_vtRp-cpGqI.

Vice-Chair Graham announced that there are potentially two spots for NSSAB members to attend the RadWaste Summit in September 2021. Conference attendance is contingent on HQ approval. NSSAB members chosen to attend are responsible for preparing a written report for the membership. Members Gary Elgort, Jim Moldenhauer, and Ron Korner expressed interest. The NSSAB Office will conduct a random drawing for the two spots after the meeting.

External Peer Review Team Composition for Central and Western Pahute Mesa – Work Plan Item #2 (John Myers, *DOE*)

- **NSSAB – Work Plan Item #2**
  - From a community perspective, the NSSAB will provide a recommendation on what types of representation should be on the external peer review (EPR) team for Pahute Mesa
  - NSSAB recommendation is due tonight
- **Outline**
  - Background
  - EPR Process
  - EPR Lessons Learned
  - EPR Team Composition

- Questions
- NSSAB Input

- **Background – Pahute Mesa**
  - 82 Corrective Action Sites
  - 60% of the NNSS inventory (~27 million curies in 2012)
  - Pahute Mesa will be the fourth to undergo peer review
    - Frenchman Flat in 2010
    - Yucca Flat/Climax Mine in 2014
    - Rainier Mesa/Shoshone Mountain in 2017/2018
  - Pahute Mesa EPR planned for 2022
- **EPR Background**
  - Required by the Federal Facility Agreement and Consent Order (FFACO) during the Corrective Action Investigation (CAI) stage
  - Held after internal review and NDEP acceptance of the Corrective Action Unit (CAU) flow and transport modeling work is completed and documented
  - Specific questions are developed for the EPR team to answer while completing their evaluation
- **EPR Process**
  - EPR team consists of scientific experts in multiple disciplines (e.g., regulatory, geology, hydrology, physics, modeling, radiochemistry, etc.)
  - Planning to completion typically takes a full year
  - Conduct a mock-up peer review internally to prepare
  - Provide tour, presentations, and discussions for EPR members to become familiar with activity
  - EPR anticipated to involve many hours of work per reviewer over a six-month period
    - EPR team members expected to review over 2,000 pages of technical information, view the modeling outcomes, etc.
  - DOE and EPR team participate in additional discussions after review is completed, if necessary
  - DOE receives report and close-out from the EPR team
  - DOE will complete additional work, if necessary; prepare a response to the EPR team report; and request approval from NDEP for the Pahute Mesa model to proceed to the Corrective Action Decision Document/Corrective Action Plan (CADD/CAP) stage of the FFACO
- **EPR Lessons Learned**
  - Consider regulatory perspectives of scientific questions when developing paths forward
    - Include regulator on EPR team
  - Allow model uncertainties identified by EPR team to be addressed during the CADD/CAP stage rather than requiring a second phase CAI stage
- **NSSAB – Work Plan Item #2**
  - From a community perspective, the NSSAB will provide a recommendation on what types of representation should be on the EPR team for Pahute Mesa
- **Criteria for Pahute Mesa EPR Members**
  - DOE will concentrate on the following technical fields:
    - Geology
    - Hydrogeology
    - Groundwater flow and transport modeling
    - Uncertainty analysis

        - Geochemistry/radiochemistry
        - Regulatory risk analysis
    - Ideally, candidates will have practical, real-world experience conducting or reviewing hydrologic or contaminant transport studies within a regulatory environment
    - Geologist
        - Expert to evaluate the geologic conceptual and framework models and its relationship to hydrogeologic setting
            - Experience in rock deformation effects (e.g., faulting) on hydrogeologic processes and parameters around nuclear detonations
    - Hydrogeologist
        - Expert to review interpretations of geologic, hydrologic, and geochemical/ radiochemical data to form an internally consistent interpretation of the flow and transport system
            - Experience in hydrology of arid environment with deep groundwater tables
    - Groundwater Flow and Transport Modeler
        - Expert with broad experience modeling groundwater flow and transport
            - Experience in fractured/faulted groundwater systems
    - Geochemist/Radiochemist
        - Expert with understanding of processes and geochemical factors affecting transport of radionuclides in groundwater
            - Experience in applying naturally occurring isotopic and chemical variations to the interpretation of groundwater systems
            - Experience with radionuclides unique to nuclear testing
    - Regulator
        - Expert with earth science/nuclear waste background
            - Experience in evaluating compliance with regulatory standards and/or use of models to inform decision-making
- **Pahute Mesa EPR Observers**
    - NDEP staff
    - Nye County representative – NSSAB recommendation from November 2013
    - NSSAB members – two (2) volunteers
- **Review**
    - The EPR is an important part of the FFACO process to help gain confidence in the models
    - Pahute Mesa is the fourth CAU to undergo the EPR
    - Implementing lessons learned from previous EPRs
- **Questions**
- **NSSAB Path Forward – Work Plan Item #2**
    - From a community perspective, the NSSAB will provide a recommendation on what types of representation should be on the EPR team for Pahute Mesa
    - NSSAB recommendation is due tonight

Based on Board questions, the following clarifications were provided:

- Credentials are not required for members of the EPR team. An extensive search was conducted for the Rainier Mesa EPR that resulted in a dozen candidates who were interviewed and evaluated on their broad range of experiences and knowledge solving

groundwater problems and successes, conducting modeling, and authoring publications in the field.

- The SDWA is the standard used by UGTA to ensure the safety of groundwater for the public. A risk assessment is conducted during UGTA remediation activities. The scope of the EPR team is to evaluate the acceptability of the model as a forecast tool to determine readiness to proceed to the CADD/CAP phase of the FFACO UGTA strategy.
- An announcement is placed in the federal government procurement process for a nation-wide search of qualified candidates for the EPR team. Additionally, UGTA staff know experts in the field and contact them directly. A formal review and selection process is conducted to thoroughly vet the applicants.
- Applicants are excluded from consideration on the EPR team if they actively work on the project or the NNSS, although does not preclude those who formerly worked on the project to leverage their experience and knowledge.
- The EPR team chooses a team lead/spokesperson to facilitate discussion during the meetings and whose responsibility includes developing a formal written report that includes the opinions of each of the members. Navarro UGTA staff provide the structure and the content for the information displayed, discussed, and presented during the EPR meetings and site tour.

After all questions were addressed, Vice-Chair Graham led Board discussion on work plan item #2 with potential recommendations provided by members during the meeting, as follows:

- Include the State of Nevada Engineer as an observer.

Member Gary Elgort made a motion that the potential recommendation above be approved as a recommendation for work plan #2. The motion was seconded. Vice-Chair Graham called for an individual voice vote that resulted in eight members voting in the affirmative, four members voting in the negative, and two members abstained. The motion passed with a majority.

- Include a technically-oriented Nye County representative as a member or an observer.

Member Richard Stephans made a motion that the potential recommendation above be approved as a recommendation for work plan #2. The motion was seconded. Vice-Chair Graham asked for clarification if a Nye County representative would be included in the Pahute Mesa EPR. Mr. Myers responded that a representative from the Nye County NRFFO will be invited to participate as an observer. Member Stephans withdrew the motion based on this information.

- Include a local water expert/hydrologist from a local water authority as an observer or EPR team member, depending on their level of knowledge.

Member Elgort made a motion that the potential recommendation above be approved as a recommendation for work plan #2. The motion was seconded and passed unanimously.

Vice-Chair Graham thanked the Board for its recommendations for EPR Team Composition for Central and Western Pahute Mesa - work plan item #2. The NSSAB Office will draft the NSSAB recommendation letter and submit to the EM Nevada Program for its consideration and response.

Corrective Action Unit (CAU) 111, Area 5 Closed Mixed Waste Cells, Revegetation Path Forward – Work Plan Item #1 (Tiffany Gamero, *DOE*)

- **NSSAB – Work Plan Item #1**
  - From a community perspective, the NSSAB will provide a recommendation suggesting a path forward regarding the vegetative cover at CAU 111
  - NSSAB recommendation is due tonight
- **Outline**
  - CAU 111 and the 92-Acre Area
  - Revegetation History
  - Tribal Revegetation Project
  - Recommendations and Lessons Learned
  - Proposed Work Strategy and Timeline
  - Questions
  - NSSAB Input
- **CAU 111**
  - Located in Area 5 of the NNSS at the Radioactive Waste Management Complex (RWMC)
  - CAU 111 was addressed for closure under the FFACO
    - Part of a larger waste disposal area that comprises 92 acres
  - The entire 92-Acre Area was addressed for FFACO closure in conjunction with CAU 111 and is subject to the closure requirements
    - For consistency, CAU 111 will be referred to as the 92-Acre Area for the rest of the briefing
- **History of Revegetation at the 92-Acre Area**
  - Area includes boreholes, trenches, and pits where waste was buried between 1961 and 2010
    - Four 8-foot-thick engineered covers were installed in 2011
  - In 2009, NDEP and DOE agreed on a closure path consisting of a vegetative cover
  - Vegetation:
    - Inhibits precipitation from percolating deep into the soil by returning moisture to the atmosphere by evapotranspiration
    - Minimizes wind and water erosion on the covers and stabilizes soils
  - In October 2011, all covers were broadcast seeded and irrigated
    - Plants initially sprouted, but most were dead by May 2013
  - In October 2013, test plots were established on North-North cover
    - Broadcast seeded, hydroseeded, and irrigated
    - Some plants sprouted, but a viable community was not established
  - In October 2014, test plots were established on South-North cover
    - Seeded, mulched, and irrigated
    - Some plants sprouted, but a viable community was not established
- **Prior NSSAB Recommendations**
  - In May 2016, the NSSAB was consulted about a possible path forward to successfully revegetate the 92-Acre Area
  - The NSSAB provided several recommendations, including:
    - Saving the topsoil when constructing waste cells and stockpiling for future use
    - Collect seeds from the local vicinity for use
    - Consider transplants
    - Experiment with smaller test plots, using varying parameters

        - Prepare the soil in advance
        - Recognize that each site is unique and should be considered separately
- **Tribal Revegetation Project**
    - One of the NSSAB's recommendations was that the EM Nevada Program consider any recommendations offered by the Tribes
    - The Tribal Revegetation Project formed the same year
        - Includes representatives from the 16 American Indian Tribal Nations and Affiliated Groups with Cultural and historical ties to the NNSS, with a goal to determine the best path forward for the 92-Acre Area covers
    - New test plots were established on the 92-Acre Area using various combinations of revegetation and outplant* treatments during two planting seasons (Fall 2017 and Spring 2018)
    - Monitoring of the test plots was conducted from 2018-2020 by Tribal members and the DRI
    - A final project report, detailing the observations and recommendations, was delivered to the EM Nevada Program in March 2021
      *Definition of an outplant: a plant transplanted from a nursery bed, greenhouse, or other location to an outside area
- **Recommendations and Lessons Learned**
    - Over the past several years, many recommendations and lessons learned regarding revegetation at the NNSS have been gleaned by multiple sources, including but not limited to:
        - Tribal Revegetation Project
        - DRI
        - MSTS (NNSS Management and Operating Contractor)
        - Navarro
        - NSSAB
        - Other organizations performing work on the NNSS
    - The following are some of the recommendations and lessons learned to be considered for use at the 92-Acre Area:
        - Include Tribal interaction
        - Use of mulch and stockpiled topsoil
        - Use of a planting subcontractor
        - Including outplants
        - Planting in the spring
        - Timely installation of a rabbit fence; caging outplants
        - Use locally gathered seeds, if possible
        - Supplement precipitation with irrigation
        - Use of wheel irrigation
- **Proposed Work Strategy**
    - Seeding
        - Mixture of native plant species suited to the Mojave Desert ecology of Area 5 RWMC
        - The top 12 to 18 inches of soil will be ripped to alleviate compaction
        - Seeds will be broadcast using a drill seeder with drag chains to cover the seeds
        - Mulch will be applied using a hydromulcher
        - Irrigation will be used to supplement precipitation
    - Outplants

        - The Nevada Division of Forestry or similar supplier will be subcontracted to grow plants from seeds provided by MSTS
        - Irrigation will be used to supplement precipitation
- **Proposed Timeline**
    - The revegetation of the 92-Acre Area is proposed to be segmented into stages due to size of the area and limited resources, such as water
        - Even though the actual area to be planted is approximately 54 acres, not 92, it is still a significant undertaking
        - Other recently revegetated covers at the Area 5 RWMC will still require irrigation and maintenance, adding to the resource limitations
        - Seeding/planting to occur in 2023-2027
        - All seeding/planting to occur in the spring
- **Next Steps**
    - EM Nevada Program:
        - Review and receive concurrence on a path forward with NDEP
        - Draft a written plan for NDEP's review and approval
- **Review**
    - The 92-Acre Area needs a successful vegetative cover
    - Many of the Tribal Revegetation Project test plots resulted in successful vegetative growth and produced multiple recommendations for a path forward
    - The proposed plan uses many recommendations and lessons learned from the Tribal Revegetation Project, DRI, NSSAB, and other organizations performing work on the NNSS
    - The proposed plan includes seeding and installing outplants on the vegetative cover in stages from 2023-2027
- **Questions**
- **NSSAB Path Forward – Work Plan Item #1**
    - From a community perspective, the NSSAB will provide a recommendation suggesting a path forward regarding the vegetative cover at CAU 111
    - NSSAB recommendation is due tonight

Based on Board questions, the following clarifications were provided:

- A Tribal report recommendation is to supplement precipitation with irrigation for a period of three years and gradually decrease irrigation for the plants to adapt to natural conditions.
- The EM Nevada Program will be reviewing its path forward with NDEP for concurrence. The current approved closure of the area is predicated on having a viable plant community on the cover. If revegetation is not successful, DOE would be responsible for developing alternative solutions for preventing groundwater to reach the waste that would require NDEP approval.
- The Tribal Revegetation Committee (TRC) monitored and studied several test plots using various treatments and approaches. The inclusion of mulch was an important contributor to the success of plant growth, as well as the establishment of plants from seeds and from the transplanting of outplants. The TRC feels that their success was largely the Tribe's continual spiritual management, as well as its connection and presence on ancestral lands. The Tribal report includes detailed records of three years of plant growth and continuous monitoring by the Committee. It is a very progressive model developed for the 92-Acre Area; so, modifications for further corrective actions could be considered from the report.

- The EM Nevada Program plans to supplement precipitation with irrigation to support the establishment of a native plant community, although does not plan to irrigate indefinitely.
- Seeds for revegetation were collected on and near the Area 5 RWMC, but the majority will be seeds purchased from a nursery that originated from the Mojave Desert.
- Introducing insects with symbiotic relationships with native plants and developing a fungal community in the soil that mirrors the surrounding desert has not been experimented with at the 92-Acre Area. The TRC has observed an increased number of wildlife and insects returning to the test plots during the past three years.
- The seeds and outplants used in the revegetation efforts are native species to the Mojave Desert in the surrounding vicinity (saltbush, Mormon tea, creosote, globe mallow, etc.).
- The water used for irrigation was sampled at the source, and the results did not indicate any issues for use on native plants. The soil was also tested, and the salinity was slightly higher than the soil outside the Area 5 RWMC.

After all questions were addressed, Vice-Chair Graham led Board discussion on work plan item #1 with potential recommendations provided by members during the meeting, as follows:

- Supplement precipitation with irrigation and provide small animal protection, such as rabbit fences, for a minimum of three years and until the plant roots are fully established.

Member Elgort made a motion that the potential recommendation above be approved as a recommendation for work plan #1. The motion was seconded and passed unanimously.

- Research the symbiotic relationships of animal and/or fungal species to create a complete self-sustaining ecosystem/biome.

Member Elgort made a motion that the potential recommendation above be approved as a recommendation for work plan #1. The motion was seconded and passed unanimously.

- Support the recommendations and lessons learned included in the briefing, as follows:
  - Include Tribal interaction
  - Use of mulch and stockpiled topsoil
  - Use of a planting subcontractor
  - Including outplants
  - Planting in the spring
  - Timely installation of a rabbit fence; caging outplants
  - Use locally gathered seeds, if possible
  - Supplement precipitation with irrigation
  - Use of wheel irrigation

Member Elgort made a motion that the potential recommendation above be approved as a recommendation for work plan #1. The motion was seconded and passed unanimously.

Vice-Chair Graham thanked the Board for its recommendations for CAU 111, Area 5 Closed Mixed Waste Cells, Revegetation Path Forward - work plan item #1. The NSSAB Office will draft the NSSAB recommendation letter and submit to the EM Nevada Program for its consideration and response.

Meeting Wrap-Up and Adjournment

Upcoming calendar of events:

- Training Session – DOE Order 435.1 Rad Waste Management Overview – May 27, 2021
- NSSAB Intergovernmental Liaisons meeting – July 21, 2021, at 3 p.m. – Las Vegas, NV
- NSSAB Full Board meeting – July 21, 2021, at 4 p.m. – Las Vegas, NV
- LLW Stakeholders Forum Meeting (invite only) – August 5, 2021 – Tentative – Location/Platform TBD
- EM Cleanup Workshop – September 8-10, 2021 – Alexandria, VA
- RadWaste Summit – September 22-24, 2021 – Las Vegas, NV

Any questions on the calendar of events, please contact the NSSAB Office at 702-523-0894.

Member Peterson made a motion to adjourn the meeting. The motion was seconded and passed unanimously. The meeting was adjourned at 7:29 p.m.